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EXAMINER	
BODDIE, WILLIAM	

ART UNIT	PAPER NUMBER
2674	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/664,320	HIGGINSON, TIMOTHY B.	
	Examiner	Art Unit	
	William Boddie	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-71,73,74 and 76-95* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-71,73,74 and 76-95* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/8/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 4-6, 17-19, 29-31, 40-42, 50-52, 60-62, 69-71 and 77-79 recite the limitation "the input mechanism" there is insufficient antecedent basis for this limitation in the claim. It appears that the Applicant intended for this limitation to state, the *manually operable* input mechanism. These claims will be examined under this assumption.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 7-9, 14, 20-21, 26, 32, 37 and 80 are rejected under 35 U.S.C. 102(e) as being anticipated by Oueslati et al. (US 6,806,865).

With respect to claim 1, Oueslati discloses, an electronic device comprising:

a base (130 in fig. 1);

a display (113 in fig. 1);

a cursor control member including an elongate, slender, rigid housing (230,235 in fig. 2), the cursor control member having an attachment element arranged at one end of the housing for detachably fixing the cursor control member to the base (235 in fig. 2, col. 4, lines 26-29);

a port carried by the base for receiving the attachment element of the cursor control member (128 in fig. 3), the port including a movable surface (125 in fig. 3) that moves in response to movement of the cursor control member when the cursor control member is engaged with the port, movement of the movable surface producing control signals for directing movement of a cursor in the display (col. 3,lines 47-50; col. 4, lines 44-46); and

a locking mechanism (screw threads on 235 in fig. 2) for securing the cursor control member to the port on the base so as to prevent unintentional withdrawal of the cursor control member from the port, the locking mechanism including a release mechanism operable to unlock the cursor control member from the port so that he cursor control member can be removed from the port (col. 4, lines 47-53, locking mechanism is equivalent to the threads of the stylus tip when turned clockwise; release mechanism is equivalent to the threads when turned counterclockwise; also note col. 4, lines 26-29).

With respect to claim 7, Oueslati discloses, the electronic device according to claim 1 (see above), wherein the attachment element of the cursor control member and the port have complementary configurations such that the cursor control member cannot rotate about its longitudinal axis relative to the movable surface on the base when the cursor control member is engaged with the port (col. 4, lines 47-53; engagement of with the port in Oueslati's invention requires the stylus tip to be screwed

in, any longitudinal rotation would disengage it from the port, therefore Oueslati's stylus is not rotatable when engaged with the port).

With respect to claim 8, Oueslati discloses, the electronic device according to claim 1 (see above), wherein the attachment element of the cursor control member and the port have complementary guide surfaces which engage each other upon insertion of the cursor control member into the port and guide the attachment (col. 4, lines 51-53, guide surfaces are the threaded portion and the screw thread configured to accept it).

With respect to claim 9, Oueslati discloses, the electronic device according to claim 1 (see above), wherein an end of the cursor control member has a stylus tip (clear from figs. 1-6).

With respect to claim 14, Oueslati discloses, an electronic device (10 in fig. 1) comprising:

a base (14 in fig. 1);

a display (16 in fig. 1);

a cursor control member including an elongate, slender, rigid housing (60 in fig. 4), the cursor control member having an attachment element arranged at one end of the housing (70-74 in fig. 4) for detachably fixing the cursor control member to the base (col. 4, lines 38-41);

a port carried by the base for receiving the attachment element of the cursor control member (50 in fig. 4), the port including a movable surface (125 in fig. 3) that moves in response to movement of the cursor control member when the cursor control member is engaged with the port, movement of the movable surface producing control signals for

directing movement of a cursor in the display (col. 3, lines 47-50; col. 4, lines 44-46); and

wherein the attachment element of the cursor control member and the port have complementary configurations such that the cursor control member cannot rotate about its longitudinal axis relative to the movable surface on the base when the cursor control member is engaged with the port (col. 4, lines 47-53; engagement of with the port in Oueslati's invention requires the stylus tip to be screwed in, any longitudinal rotation would disengage it from the port, therefore Oueslati's stylus is not rotatable when engaged with the port).

With respect to claim 20, Oueslati discloses, the electronic device according to claim 14 (see above), wherein the attachment element of the cursor control member and the port have complementary guide surfaces which engage each other upon insertion of the cursor control member into the port and guide the attachment (col. 4, lines 51-53, guide surfaces are the threaded portion and the screw thread configured to accept it).

With respect to claim 21, Oueslati discloses, the electronic device according to claim 14 (see above), wherein an end of the cursor control member has a stylus tip (clear from figs. 1-6).

With respect to claim 26, Oueslati discloses, an electronic device comprising:

a base (130 in fig. 1);

a display (113 in fig. 1);

a cursor control member including an elongate, slender, rigid housing (230,235 in fig. 2), the cursor control member having an attachment element arranged at one end of the housing for detachably fixing the cursor control member to the base (235 in fig. 2, col. 4, lines 26-29);

a port carried by the base for receiving the attachment element of the cursor control member (128 in fig. 3), the port including a movable surface (125 in fig. 3) that moves in response to movement of the cursor control member when the cursor control member is engaged with the port, movement of the movable surface producing control signals for directing movement of a cursor in the display (col. 3, lines 47-50; col. 4, lines 44-46); and

wherein the attachment element of the cursor control member and the port have complementary guide surfaces which engage each other upon insertion of the cursor control member into the port and guide the attachment (col. 4, lines 51-53, guide surfaces are the threaded portion and the screw thread configured to accept it).

With respect to claim 32, Oueslati discloses, the electronic device according to claim 26 (see above), wherein an end of the cursor control member has a stylus tip (clear from figs. 1-6).

With respect to claim 37, Oueslati discloses, an electronic device comprising:

a base (130 in fig. 1);

a display (113 in fig. 1);

a cursor control member including an elongate, slender, rigid housing (230,235 in fig. 2), the cursor control member having an attachment element arranged at one end of the

housing for detachably fixing the cursor control member to the base (235 in fig. 2, col. 4, lines 26-29);

a port carried by the base for receiving the attachment element of the cursor control member, the port being adapted to translate movement of the cursor control member into control signals for directing movement of a cursor in the display when the cursor control member is engaged with the port (fig. 5, col. 3, lines 47-59; col. 4, lines 44-46); and

wherein an end of the cursor control member has a stylus tip (clear from figs. 1-6).

With respect to claim 80, Oueslati discloses, a cursor control member for an electronic device having a display (113 in fig. 1) and a port (128 in fig. 3), the port including a movable surface (125 in fig. 3) that moves in response to movement of the cursor control member when the cursor control member is engaged with the port, movement of the movable surface producing control signals for directing movement of a cursor in the display (col. 3, lines 47-50; col. 4, lines 44-46), the cursor control member comprising an elongate, slender, rigid housing (230,235 in fig. 2) with an attachment element arranged at one end housing which can be received in the port (235 in fig. 2, col. 4, lines 26-29) and wherein an end of the housing is configured as a stylus tip (clear from figs. 1-6).

5. Claims 14, 16-17, 20, 26, and 28-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Hoggarth (US 6,654,004).

With respect to claim 14, Hoggarth discloses, an electronic device (10 in fig. 1) comprising:

a base (14 in fig. 1);

a display (16 in fig. 1);

a cursor control member including an elongate, slender, rigid housing (60 in fig. 4), the cursor control member having an attachment element arranged at one end of the housing (70-74 in fig. 4) for detachably fixing the cursor control member to the base (col. 4, lines 38-41);

a port carried by the base for receiving the attachment element of the cursor control member (50 in fig. 4), the port including a movable surface (50 in fig. 4) that moves in response to movement of the cursor control member when the cursor control member is engaged with the port (col. 4, lines 7-15), movement of the movable surface producing control signals for directing movement of a cursor in the display (col. 4, lines 54-60); and

wherein the attachment element of the cursor control member and the port have complementary configurations (fig. 4, both rectangles) such that the cursor control member cannot rotate about its longitudinal axis relative to the movable surface on the base when the cursor control member is engaged with the port (With the configuration design shown fig. 4 for example, it is inherent that longitudinal rotation will not be possible).

With respect to claim 20, Hoggarth discloses, the electronic device according to claim 14 (see above), wherein the attachment element of the cursor control member and the port have complementary guide surfaces which engage each other upon insertion of the cursor control member into the port and guide the attachment (the two

surfaces rectangular post and rectangular hole help to bring the cursor control member's contacts into engagement with the port, col. 4, lines 38-41).

With respect to claim 26, Hoggarth discloses, an electronic device (10 in fig. 1) comprising:

a base (14 in fig. 1);

a display (16 in fig. 1);

a cursor control member including an elongate, slender, rigid housing (60 in fig. 4), the cursor control member having an attachment element arranged at one end of the housing (70-74 in fig. 4) for detachably fixing the cursor control member to the base (col. 4, lines 38-41);

a port carried by the base for receiving the attachment element of the cursor control member (50 in fig. 4), the port including a movable surface (50 in fig. 4) that moves in response to movement of the cursor control member when the cursor control member is engaged with the port (col. 4, lines 7-15), movement of the movable surface producing control signals for directing movement of a cursor in the display (col. 4, lines 54-60); and

wherein the attachment element of the cursor control member and the port have complementary guide surfaces which engage each other upon insertion of the cursor control member into the port and guide the attachment (the two surfaces rectangular post and rectangular hole help to bring the cursor control member's contacts into engagement with the port, col. 4, lines 38-41).

With respect to claims 16 and 28, Hoggarth discloses, the electronic device according to claims 14 and 26 (see above), wherein the cursor control member includes

a manually operable input mechanism (64 in fig. 4) that produces control signals when operated and the attachment element and port are configured so as to communicate those control signals to a processing unit in the base (col. 4, lines 61-67).

With respect to claims 17 and 29, Hoggarth discloses, the electronic device according to claims 16 and 28 (see above), wherein the input mechanism comprises a button (80 in fig. 4).

6. Claim 75 is rejected under 35 U.S.C. 102(e) as being anticipated by Langstraat (US 2003/0076302).

With respect to claim 75, Langstraat discloses, an electronic device (100 in fig. 1) comprising:

a base (106 in fig. 1);

a display (110 in fig. 1);

a cursor control member including a housing (112 in fig. 1), the cursor control member having an attachment element arranged at one end of the housing for detachably securing the cursor control member to the base (para. 16, last two sentences; attachment element is the tapered stylus end of the cursor control member);

a port carried by the base for receiving the attachment element of the cursor control member (130 in fig. 3), the port including a movable surface (134 in fig. 5) that moves in response to movement of the cursor control member when the cursor control member is engaged with the port (130 in fig. 5), movement of the movable surface producing control signals for directing movement of a cursor in the display (para. 22-23); and

a storage slot on the base, the storage slot being configured to receive the cursor control member (118,120 in fig. 2).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1 and 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Burnett (US 5,615,083).

With respect to claim 1, Hoggarth discloses, an electronic device comprising:

a base (14 in fig. 1);

a display (16 in fig. 1);

a cursor control member including an elongate, slender, rigid housing (60 in fig. 4), the cursor control member having an attachment element arranged at one end of the housing for detachably fixing the cursor control member to the base (70 in fig. 4);

a port carried by the base for receiving the attachment element of the cursor control member (51 in fig. 4), the port including a movable surface (50 in fig. 4) that moves in response to movement of the cursor control member when the cursor control member is engaged with the port (col. 4, lines 7-15), movement of the movable surface producing control signals for directing movement of a cursor in the display (col. 4, lines 7-15).

Hoggarth does not expressly disclose a locking mechanism.

Burnett discloses, a locking mechanism for securing the cursor control member to the port on the base so as to prevent unintentional withdrawal of the cursor control member from the port (fig. 3), the locking mechanism including a release mechanism operable to unlock the cursor control member from the port so that he cursor control member can be removed from the port (118 in fig. 1, col. 5, lines 40-60).

Burnett and Hoggarth are analogous art because they are both from the same field of endeavor namely, removable joystick attachments.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the locking mechanism, taught by Burnett, on the joystick of Hoggarth.

The motivation for doing so would have been to effectively secure the joystick in the receptacle (Burnett, col. 2, lines 62-65) thus not inadvertently dislodging the joystick (Burnett, col. 2, lines 53-56).

Therefore it would have been obvious to combine Burnett with Hoggarth for the benefit of a secure connection between the joystick and base to obtain the invention as specified in claim 1.

With respect to claim 3, Hoggarth and Burnett disclose, the electronic device of claim 1 (see above).

Hoggarth further discloses, wherein the cursor control member includes a manually operable input mechanism (64 in fig. 4) that produces control signals when operated and the attachment element and port are configured so as to communicate those control signals to a processing unit in the base (col. 4, lines 61-67).

With respect to claim 4, Hoggarth and Burnett disclose, the electronic device of claim 3 (see above).

Hoggarth further discloses, wherein the input mechanism comprises a button (80 in fig. 4; col. 5, lines 7-15).

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Burnett (US 5,615,083) and further in view of May (US 6,509,890).

With respect to claim 2, Hoggarth and Burnett disclose the electronic device according to claim 1 (see above).

Neither Hoggarth nor Burnett expressly discloses the port is arranged on an adapter that is releasably connectable to the base.

May discloses, a TrackPoint® port on an adapter that is releasably connectable to the base (fig. 1, col. 2, lines 9-24).

Hoggarth, Burnett and May are all analogous art because they are all from the same field of endeavor namely removable cursor control devices for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to connect the joystick of Hoggarth and Burnett, to the TrackPoint® adapter of May. To further explain, TrackPoint® is used by both Hoggarth and May, thus making the combination even more clear.

One motivation for the above combination is to allow for two-handed manipulation (May, col. 1, lines 37-40).

Therefore it would have been obvious to combine Hoggarth and Burnett with May for the benefit of two-handed manipulation to obtain the invention as specified in claim 2.

10. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Burnett (US 5,615,083) and further in view of Fleck et al. (US 6,259,438).

With respect to claims 5-6, Burnett and Hoggarth disclose, the electronic device of claim 1 (see above).

Neither Burnett nor Hoggarth discloses, a touch screen or a wheel.

Fleck discloses, a cursor control member (fig. 1) containing a wheel (7 in fig. 1) and a touch screen (51 in fig. 8; col. 2, lines 54-67).

Burnett, Hoggarth and Fleck are all analogous art because they are from the same field of endeavor namely cursor control devices for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include a wheel or a touch pad as taught by Fleck in the joystick of Hoggarth and Burnett.

The motivation for doing so would have been to allow the user to manipulate two degrees of freedom with the touch sensitive area (Fleck; col. 2, lines 65-67).
Therefore it would have been obvious to combine Fleck with Burnett and Hoggarth for the benefit of additional functionality to obtain the invention as specified in claims 5-6.

11. Claims 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Burnett (US 5,615,083) and further in view of Maeda et al. (JP 05/181,582).

With respect to claims 10 and 11, Hoggarth and Burnett disclose, the electronic device according to claim 1 (see above).

Hoggarth further discloses, adding more electrical contacts to facilitate additional functionality for the user (col. 5, lines 7-9).

Neither Hoggarth nor Burnett expressly discloses, wherein the cursor control member has a memory.

Maeda discloses, wherein a cursor control member (140 in fig. 3) has a memory (310 in fig. 3) and a port (380 in fig. 3) and an attachment element of the cursor control member (320 in fig. 3) are configured such that content stored in the memory of the cursor control member can be communicated to a processing unit (360 in fig. 3) in a base when the cursor control member is engaged with the port (para. 4).

With regards to claim 11, from paragraph 4 of Maeda it is clear that the memory of the pen is usable by the processor.

Hoggarth, Burnett and Maeda are all analogous art because they are all from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the electrical contacts and memory taught by Maeda as additional contacts in the cursor control member of Hoggarth and Burnett.

The motivation for doing so would have been to remove the need for additional storage devices such as floppy disks to transfer information, instead creating a dual-purpose device (Maeda, para. 3).

Therefore it would have been obvious to combine Hoggarth, Burnett and Maeda for the benefit of convenient data transmission to obtain the invention as specified in claims 10 and 11.

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Burnett (US 5,615,083) and further in view of Miyashita et al. (US 6,909,906).

With respect to claim 12, Hoggarth and Burnett disclose, the electronic device according to claim 1 (see above).

Hoggarth further discloses, adding more electrical contacts to facilitate additional functionality for the user (col. 5, lines 7-9).

Neither Hoggarth nor Burnett expressly discloses, wherein the cursor control member includes a power supply that supplies power to the base.

Miyashita discloses, a cursor control member (131 in fig. 2) including a power supply (105 in fig. 3) and a port (127 in fig. 2) and attachment element of the cursor control member (111 and 141 in fig. 4) configured such that power produced by the power supply in the cursor control member is available to operate the processing unit in the base when the cursor control member is engaged with the port (col. 6, lines 9-21).

Hoggarth, Burnett and Miyashita are all analogous art because they are all from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the electrical contacts and power supply taught by Miyashita as additional contacts in the cursor control member of Hoggarth and Burnett.

The motivation for doing so would have been to recharge the main power supply (Miyashita, col. 6, lines 9-21).

Therefore it would have been obvious to combine Hoggarth and Burnett with Miyashita for the benefit of lengthening the battery life of the base to obtain the invention as specified in claim 12.

13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oueslati et al. (US 6,806,865) in view of Langstraat (US 2003/0076302).

With respect to claim 13, Oueslati discloses, the electronic device according to claim 1 (see above).

Oueslati does not expressly disclose a storage slot.

Langstraat discloses, a storage slot on the base (118 in fig. 1-2), the storage slot being configured to receive the cursor control member (fig. 1-2).

Oueslati and Langstraat are analogous art because they are both from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include a storage slot, as taught by Langstraat, to house the cursor control member of Oueslati.

The motivation for doing so would have been convenience for the user, lessening the likelihood of losing the cursor control member.

Therefore it would have been obvious to combine Langstraat with Oueslati for the benefit of user convenience to obtain the invention as specified in claim 13.

14. Claims 15 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of May (US 6,509,890).

With respect to claims 15 and 27, Hoggarth discloses the electronic device according to claims 14 and 26 (see above).

Hoggarth does not expressly disclose the port is arranged on an adapter that is releasably connectable to the base.

May discloses, a TrackPoint® port on an adapter that is releasably connectable to the base (fig. 1, col. 2, lines 9-24).

Hoggarth and May are analogous art because they are all from the same field of endeavor namely removable cursor control devices for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to connect the joystick of Hoggarth, to the base using the TrackPoint® adapter of May. To further explain, TrackPoint® is used by both Hoggarth and May, thus making the combination even more clear.

One motivation for the above combination is to allow for two-handed manipulation (May, col. 1, lines 37-40).

Therefore it would have been obvious to combine Hoggarth with May for the benefit of two-handed manipulation to obtain the invention as specified in claims 15 and 27.

15. Claims 18-19 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Burnett (US 5,615,083) and further in view of Fleck et al. (US 6,259,438).

With respect to claims 18-19 and 30-31, Hoggarth discloses, the electronic device of claims 14 and 26 (see above).

Hoggarth does not expressly disclose, a touch screen or a wheel.

Fleck discloses, a cursor control member (fig. 1) containing a wheel (7 in fig. 1) and a touch screen (51 in fig. 8; col. 2, lines 54-67).

Hoggarth and Fleck are analogous art because they are from the same field of endeavor namely cursor control devices for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include a wheel or a touch pad as taught by Fleck in the joystick of Hoggarth.

The motivation for doing so would have been to allow the user to manipulate two degrees of freedom with the touch sensitive area (Fleck; col. 2, lines 65-67).

Therefore it would have been obvious to combine Fleck with Hoggarth for the benefit of additional functionality to obtain the invention as specified in claims 18-19 and 30-31.

16. Claims 22-23, 33-34, 47, 49-50, 57, 59-60, 81, 86-89 and 93-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Maeda et al. (JP 05/181,582).

With respect to claims 22-23 and 33-34, Hoggarth discloses, the electronic device according to claims 14 and 26 (see above).

Hoggarth further discloses, adding more electrical contacts to facilitate additional functionality for the user (col. 5, lines 7-9).

Hoggarth does not expressly disclose, wherein the cursor control member has a memory.

Maeda discloses, wherein a cursor control member (140 in fig. 3) has a memory (310 in fig. 3) and a port (380 in fig. 3) and an attachment element of the cursor control member (320 in fig. 3) are configured such that content stored in the memory of the cursor control member can be communicated to a processing unit (360 in fig. 3) in a base when the cursor control member is engaged with the port (para. 4).

With regards to claims 23 and 34, from paragraph 4 of Maeda it is clear that the memory of the pen is usable by the processor.

Hoggarth and Maeda are analogous art because they are all from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the electrical contacts and memory taught by Maeda as additional contacts in the cursor control member of Hoggarth.

The motivation for doing so would have been to remove the need for additional storage devices such as floppy disks to transfer information, instead creating a dual-purpose device (Maeda, para. 3).

Therefore it would have been obvious to combine Hoggarth and Maeda for the benefit of convenient data transmission to obtain the invention as specified in claims 22-23 and 33-34.

With respect to claims 47, 57, 81 and 93, Hoggarth discloses, an electronic device (10 in fig. 1) comprising:

a base (14 in fig. 1);

a cursor control member (60 in fig. 4) including:

a housing (62 in fig. 4),

an attachment element (70 in fig. 4), arranged at one end of the housing for detachably securing the cursor control member to the base, and

a port carried by the base for receiving the attachment element of the cursor control member (50 in fig. 4), the port being adapted to translate movement of the cursor control member into control signals for directing movement of a cursor in a display (col. 4, lines 7-15), when the cursor control member is engaged with the port (col. 4, lines 54-67).

Hoggarth does not expressly disclose, a memory being included in the cursor control member.

Maeda discloses, a memory (310 in fig. 3); and wherein a port (380 in fig. 3) and a attachment element (320 in fig. 3) of a cursor control member (140 in fig. 3) are

configured such that content stored in the memory of the cursor control member can be communicated to a processing unit (360 in fig. 3) when the cursor control member is engaged with the port (para. 4).

For the reasons shown above it would have been obvious to combine Hoggarth and Maeda for the benefit of convenient data transmission to obtain the invention as specified in claims 47, 57 and 81.

With respect to claims 49 and 59, Hoggarth and Maeda disclose, the electronic device of claims 47 and 57 (see above).

Hoggarth further discloses, wherein the cursor control member includes a manually operable input mechanism (64 in fig .4) that produces control signals when operated and the attachment element and port are configured so as to communicate those control signals to a processing unit in the base (col. 4, lines 61-67).

With respect to claims 50 and 60, Hoggarth and Maeda disclose, the electronic device of claims 47 and 57 (see above).

Hoggarth further discloses, wherein the input mechanism comprises a button (80 in fig. 4; col. 5, lines 7-15).

With respect to claims 86-87, Hoggarth and Maeda disclose the electronic device of claim 47 (see above).

Hoggarth further discloses that the electronic device is a laptop personal computer (col. 1, lines 16-22).

With respect to claims 88-89, Hoggarth and Maeda disclose the electronic device of claim 47 (see above).

Hoggarth further discloses, a processing unit in the base (CPU; col. 1, lines 36-38), and a display in the base (LCD; col. 1, lines 31-35).

With respect to claim 94, Hoggarth and Maeda disclose, the electronic device of claim 93 (see above).

Hoggarth further discloses, wherein the cursor control member houses mechanical (64 and 80 in fig. 4) and electrical components (72 and 74 in fig. 4) for translating the physical manipulation (trigger and button press) of the cursor control member into signals corresponding to the cursor control signals transmitted by the port (col. 4, lines 61-67).

With respect to claim 95, Hoggarth and Maeda disclose, the electronic device of claim 94 (see above).

Hoggarth further discloses, wherein the port translates cursor control signals received from the cursor control member into the cursor control signals transmitted by the port (col. 4, lines 61-67).

17. Claims 24, 35, 66 and 68-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Miyashita et al. (US 6,909,906).

With respect to claims 24 and 35, Hoggarth discloses, the electronic device according to claims 14 and 26 (see above).

Hoggarth further discloses, adding more electrical contacts to facilitate additional functionality for the user (col. 5, lines 7-9).

Hoggarth does not expressly discloses, wherein the cursor control member includes a power supply that supplies power to the base.

Miyashita discloses, a cursor control member (131 in fig. 2) including a power supply (105 in fig. 3) and a port (127 in fig. 2) and attachment element of the cursor control member (111 and 141 in fig. 4) configured such that power produced by the power supply in the cursor control member is available to operate the processing unit in the base when the cursor control member is engaged with the port (col. 6, lines 9-21).

Hoggarth and Miyashita are analogous art because they are all from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the electrical contacts and power supply taught by Miyashita as additional contacts in the cursor control member of Hoggarth.

The motivation for doing so would have been to recharge the main power supply (Miyashita, col. 6, lines 9-21).

Therefore it would have been obvious to combine Hoggarth with Miyashita for the benefit of lengthening the battery life of the base to obtain the invention as specified in claims 24 and 35.

With respect to claim 66, Hoggarth discloses, an electronic device (10 in fig. 1) comprising:

a base (14 in fig. 1);

a display (16 in fig. 1);

a cursor control member including an elongate, slender, rigid housing (60 in fig. 4), the cursor control member having an attachment element arranged at one end of the

housing (70-74 in fig. 4) for detachably fixing the cursor control member to the base (col. 4, lines 38-41);

a port carried by the base for receiving the attachment element of the cursor control member (50 in fig. 4), the port including a movable surface (50 in fig. 4) that moves in response to movement of the cursor control member when the cursor control member is engaged with the port (col. 4, lines 7-15), movement of the movable surface producing control signals for directing movement of a cursor in the display (col. 4, lines 54-60).

Hoggarth does not expressly disclose, a power supply in the cursor control member.

Miyashita discloses, a cursor control member (131 in fig. 2) including a power supply (105 in fig. 3) and a port (127 in fig. 2) and attachment element of the cursor control member (111 and 141 in fig. 4) configured such that power produced by the power supply in the cursor control member is available to operate the processing unit in the base when the cursor control member is engaged with the port (col. 6, lines 9-21).

As shown above it would have been obvious to combine Hoggarth with Miyashita for the benefit of lengthening the battery life of the base to obtain the invention as specified in claim 66.

With respect to claim 68, Hoggarth and Miyashita disclose, the electronic device of claim 66 (see above).

Hoggarth further discloses, wherein the cursor control member includes a manually operable input mechanism that produces control signals when operated and

the attachment element and port are configured so as to communicate those control signals to a processing unit in the base (64 in fig. 4, col. 4, lines 61-67).

With respect to claim 69, Hoggarth and Miyashita disclose, the electronic device of claim 68 (see above).

Hoggarth further discloses, wherein the input mechanism comprises a button (80 in fig. 4; col. 5, lines 7-15).

18. Claims 25 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Langstraat (US 2003/0076302).

With respect to claims 25 and 36, Hoggarth discloses, the electronic device according to claims 14 and 26 (see above).

Hoggarth does not expressly disclose a storage slot on the base for the cursor control.

Langstraat discloses a storage slot on the base, the storage slot being configured to receive the cursor control member (118 in figs. 1-2).

Hoggarth and Langstraat are analogous art because they are both from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to construct the base and design of the cursor control member of Hoggarth in a fashion similar to Langstraat.

The motivation for doing so would have been convenience for the user, lessening the likelihood of losing the cursor control member.

Therefore it would have been obvious to combine Langstraat with Hoggarth for the benefit of user convenience to obtain the invention as specified in claims 25 and 36.

19. Claims 37 and 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Oueslati et al. (US 6,806,865).

With respect to claim 37, Hoggarth discloses, an electronic device (10 in fig. 1) comprising:

a base (14 in fig. 1);

a display (16 in fig. 1);

a cursor control member including an elongate, slender, rigid housing (60 in fig. 4), the cursor control member having an attachment element arranged at one end of the housing (70-74 in fig. 4) for detachably fixing the cursor control member to the base (col. 4, lines 38-41);

a port carried by the base for receiving the attachment element of the cursor control member (50 in fig. 4), the port being adapted to translate movement of the cursor control member into control signals (col. 4, lines 7-15) for directing movement of a cursor in a display when the cursor control member is engaged with the port (col. 4, lines 54-67).

Hoggarth does not expressly disclose, wherein an end of the cursor control member has a stylus tip (clear from figs. 1-6).

Oueslati discloses, wherein an end of a cursor control member has a stylus tip (clear from figs. 1-6).

Oueslati and Hoggarth are analogous art because they are from the same field of endeavor namely removable cursor control devices for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the stylus tip of Oueslati on the joystick of Hoggarth.

The motivation for doing so would have been to additional allow the joystick to function as a touch-screen input device (Oueslati, col. 2, lines 64-67).

Therefore it would have been obvious to combine Oueslati with Hoggarth for the benefit of additional functionality to obtain the invention as specified in claim 37.

With respect to claim 39, Hoggarth and Oueslati disclose, the electronic device of claim 37 (see above).

Hoggarth further discloses, wherein the cursor control member includes a manually operable input mechanism (64 in fig. 4) that produces control signals when operated and the attachment element and port are configured so as to communicate those control signals to a processing unit in the base (col. 4, lines 61-67).

With respect to claim 40, Hoggarth and Oueslati disclose, the electronic device of claim 37 (see above).

Hoggarth further discloses, wherein the input mechanism comprises a button (80 in fig. 4; col. 5, lines 7-15).

20. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Oueslati et al. (US 6,806,865) and further in view of May (US 6,509,890).

With respect to claim 38, Hoggarth and Oueslati disclose the electronic device according to claim 37 (see above).

Neither Hoggarth nor Oueslati expressly disclose the port is arranged on an adapter that is releasably connectable to the base.

May discloses, a TrackPoint® port on an adapter that is releasably connectable to the base (fig. 1, col. 2, lines 9-24).

Hoggarth, Oueslati and May are all analogous art because they are all from the same field of endeavor namely removable cursor control devices for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to connect the joystick of Hoggarth and Oueslati, to the base using the TrackPoint® adapter of May. To further explain, TrackPoint® is used by both Hoggarth and May, thus making the combination even more clear.

One motivation for the above combination is to allow for two-handed manipulation (May, col. 1, lines 37-40).

Therefore it would have been obvious to combine Hoggarth and Oueslati with May for the benefit of two-handed manipulation to obtain the invention as specified in claim 38.

21. Claims 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Oueslati et al. (US 6,806,865).and further in view of Fleck et al. (US 6,259,438).

With respect to claims 41-42, Oueslati and Hoggarth disclose, the electronic device of claim 37 (see above).

Neither Oueslati nor Hoggarth discloses, a touch screen or a wheel.

Fleck discloses, a cursor control member (fig. 1) containing a wheel (7 in fig. 1) and a touch screen (51 in fig. 8; col. 2, lines 54-67).

Oueslati, Hoggarth and Fleck are all analogous art because they are from the same field of endeavor namely cursor control devices for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include a wheel or a touch pad as taught by Fleck in the joystick of Hoggarth and Oueslati.

The motivation for doing so would have been to allow the user to manipulate two degrees of freedom with the touch sensitive area (Fleck; col. 2, lines 65-67).
Therefore it would have been obvious to combine Fleck with Oueslati and Hoggarth for the benefit of additional functionality to obtain the invention as specified in claims 41-42.

22. Claims 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Oueslati et al. (US 6,806,865) and further in view of Maeda et al. (JP 05/181,582).

With respect to claims 43 and 44, Hoggarth and Oueslati disclose, the electronic device according to claim 37 (see above).

Hoggarth further discloses, adding more electrical contacts to facilitate additional functionality for the user (col. 5, lines 7-9).

Neither Hoggarth nor Oueslati expressly disclose, wherein the cursor control member has a memory.

Maeda discloses, wherein a cursor control member (140 in fig. 3) has a memory (310 in fig. 3) and a port (380 in fig. 3) and an attachment element of the cursor control member (320 in fig. 3) are configured such that content stored in the memory of the cursor control member can be communicated to a processing unit (360 in fig. 3) in a base when the cursor control member is engaged with the port (para. 4).

With regards to claim 44, from paragraph 4 of Maeda it is clear that the memory of the pen is usable by the processor.

Hoggarth, Oueslati and Maeda are all analogous art because they are all from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the electrical contacts and memory taught by Maeda as additional contacts in the cursor control member of Hoggarth and Oueslati.

The motivation for doing so would have been to remove the need for additional storage devices such as floppy disks to transfer information, instead creating a dual-purpose device (Maeda, para. 3).

Therefore it would have been obvious to combine Hoggarth, Oueslati and Maeda for the benefit of convenient data transmission to obtain the invention as specified in claims 43 and 44.

23. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Oueslati et al. (US 6,806,865) and further in view of Miyashita et al. (US 6,909,906).

With respect to claim 45, Hoggarth and Oueslati disclose, the electronic device according to claim 37 (see above).

Hoggarth further discloses, adding more electrical contacts to facilitate additional functionality for the user (col. 5, lines 7-9).

Neither Hoggarth nor Oueslati expressly discloses, wherein the cursor control member includes a power supply that supplies power to the base.

Miyashita discloses, a cursor control member (131 in fig. 2) including a power supply (105 in fig. 3) and a port (127 in fig. 2) and attachment element of the cursor control member (111 and 141 in fig. 4) configured such that power produced by the power supply in the cursor control member is available to operate the processing unit in the base when the cursor control member is engaged with the port (col. 6, lines 9-21).

Hoggarth, Oueslati and Miyashita are all analogous art because they are all from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the electrical contacts and power supply taught by Miyashita as additional contacts in the cursor control member of Hoggarth and Oueslati.

The motivation for doing so would have been to recharge the main power supply (Miyashita, col. 6, lines 9-21).

Therefore it would have been obvious to combine Hoggarth and Oueslati with Miyashita for the benefit of lengthening the battery life of the base to obtain the invention as specified in claim 45.

24. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Oueslati et al. (US 6,806,865) and further in view of Langstraat (US 2003/0076302).

With respect to claims 46, Hoggarth and Oueslati discloses, the electronic device according to claims 37 (see above).

Neither Hoggarth nor Oueslati expressly disclose a storage slot on the base for the cursor control.

Langstraat discloses a storage slot on the base, the storage slot being configured to receive the cursor control member (118 in figs. 1-2).

Hoggarth, Oueslati and Langstraat are all analogous art because they are both from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to construct the base and design of the cursor control member of Hoggarth and Oueslati in a fashion similar to Langstraat.

The motivation for doing so would have been convenience for the user, lessening the likelihood of losing the cursor control member.

Therefore it would have been obvious to combine Langstraat with Hoggarth and Oueslati for the benefit of user convenience to obtain the invention as specified in claims 46.

25. Claims 48, 58 and 90-91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Maeda (JP 05/181,582) and further in view of May (US 6,509,890).

With respect to claims 48 and 58, Hoggarth and Maeda disclose the electronic device according to claims 47 and 57 (see above).

Neither Hoggarth nor Maeda expressly disclose the port is arranged on an adapter that is releasably connectable to the base.

May discloses, a TrackPoint® port on an adapter that is releasably connectable to the base (fig. 1, col. 2, lines 9-24).

Hoggarth, Maeda and May are all analogous art because they are all from the same field of endeavor namely removable cursor control devices for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to connect the joystick of Hoggarth and Maeda, to the base using the TrackPoint® adapter of May. To further explain, TrackPoint® is used by both Hoggarth and May, thus making the combination even more clear.

One motivation for the above combination is to allow for two-handed manipulation (May, col. 1, lines 37-40).

Therefore it would have been obvious to combine Hoggarth and Maeda with May for the benefit of two-handed manipulation to obtain the invention as specified in claims 48 and 58.

With respect to claims 90 and 91, Hoggarth and Maeda disclose, the electronic device of claim 47 (see above), wherein a two-dimensional array of keys is disposed upon a generally planar surface of the base (22 in fig. 1).

Neither Hoggarth nor Maeda, expressly disclose, the port being positioned distal from the keys or to the side of the keys.

May discloses, an adapter with a port on it. The adapter once attached orients the port at both a distal and a side position from the keys (figure 1).

26. Claims 51-52 and 61-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Maeda et al. (JP 05/181,582) and further in view of Fleck et al. (US 6,259,438).

With respect to claims 51-52 and 61-62, Maeda and Hoggarth disclose, the electronic device of claims 47 and 57 (see above).

Neither Maeda nor Hoggarth discloses, a touch screen or a wheel.

Fleck discloses, a cursor control member (fig. 1) containing a wheel (7 in fig. 1) and a touch screen (51 in fig. 8; col. 2, lines 54-67).

Maeda, Hoggarth and Fleck are all analogous art because they are from the same field of endeavor namely cursor control devices for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include a wheel or a touch pad as taught by Fleck in the joystick of Hoggarth and Maeda.

The motivation for doing so would have been to allow the user to manipulate two degrees of freedom with the touch sensitive area (Fleck; col. 2, lines 65-67).

Therefore it would have been obvious to combine Fleck with Maeda and Hoggarth for the benefit of additional functionality to obtain the invention as specified in claims 51-52 and 61-62.

27. Claims 54, 63 and 82-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Maeda (JP 05/181,582) and further in view of Miyashita et al. (US 6,909,906).

With respect to claims 54 and 63, Hoggarth and Maeda disclose, the electronic device according to claims 47 and 57 (see above).

Hoggarth further discloses, adding more electrical contacts to facilitate additional functionality for the user (col. 5, lines 7-9).

Neither Hoggarth nor Maeda expressly discloses, wherein the cursor control member includes a power supply that supplies power to the base.

Miyashita discloses, a cursor control member (131 in fig. 2) including a power supply (105 in fig. 3) and a port (127 in fig. 2) and attachment element of the cursor control member (111 and 141 in fig. 4) configured such that power produced by the power supply in the cursor control member is available to operate the processing unit in the base when the cursor control member is engaged with the port (col. 6, lines 9-21).

Hoggarth, Maeda and Miyashita are all analogous art because they are all from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the electrical contacts and power supply taught by Miyashita as additional contacts in the cursor control member of Hoggarth and Maeda.

The motivation for doing so would have been to recharge the main power supply (Miyashita, col. 6, lines 9-21).

Therefore it would have been obvious to combine Hoggarth and Maeda with Miyashita for the benefit of lengthening the battery life of the base to obtain the invention as specified in claims 54 and 63.

With respect to claims 82-84, Hoggarth and Maeda disclose, the electronic device of claim 47 (see above).

Miyashita discloses, a device that is a mobile phone that supports wireless voice, data, and telephone communications (col. 1, lines 7-11).

At the time of the invention it would have been obvious to use the cursor control member of Hoggarth and Maeda in the mobile phone of Miyashita.

The motivation for doing so would have been, to provide a portable information input apparatus and a portable device capable of improving the operability of data entry (May, col. 2, lies 35-38).

28. Claims 55, 64 and 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Maeda (JP 05/181,582) and further in view of Langstraat (US 2003/0076302).

With respect to claims 55 and 64, Hoggarth and Maeda disclose, the electronic device according to claims 47 and 57 (see above).

Neither Hoggarth nor Maeda expressly disclose a storage slot on the base for the cursor control.

Langstraat discloses a storage slot on the base, the storage slot being configured to receive the cursor control member (118 in figs. 1-2).

Hoggarth, Maeda and Langstraat are all analogous art because they are both from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to construct the base and design of the cursor control member of Hoggarth and Maeda in a fashion similar to Langstraat.

The motivation for doing so would have been convenience for the user, lessening the likelihood of losing the cursor control member.

Therefore it would have been obvious to combine Langstraat with Hoggarth and Maeda for the benefit of user convenience to obtain the invention as specified in claims 55 and 64.

With respect to claim 85, Hoggarth and Maeda disclose, the electronic device of claim 47 (see above).

Langstraat discloses, wherein the electronic device is a PDA (fig. 1 and para. 2).

At the time of the invention it would have been obvious to replace the laptop of Hoggarth and Maeda with the PDA taught by Langstraat.

The motivation for doing so would have been for the smaller handheld size increasing portability (Langstraat, para. 2).

29. Claims 56 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Maeda et al. (JP 05/181,582) and further in view of May et al. (US 6,271,834).

With respect to claims 56 and 65, Hoggarth and Maeda disclose, the electronic device according to claims 47 and 57 (see above).

Neither Hoggarth nor Maeda expressly disclose, feedback signals to the device.

May discloses, wherein a processing unit (12 in fig. 1) of the base (10 in fig. 1) produces a second control signal (electrical signal, col. 4, lines 10-18) that controls movement of a cursor control member (movement of the cap, col. 4, lines 10-18) upon occurrence of a predetermined event (depressing joystick actuator, col. 4, lines 10-18) when the cursor control member is engaged with the port (fig. 4).

Hoggarth, Maeda and May are all analogous art because they are both from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include feedback as taught by May in the cursor control member of Hoggarth and Maeda.

The motivation for doing so would have been to overcome the tedious nature of clicking with a TrackPoint® control actuator (May, col. 2, lines 34-37).

Therefore it would have been obvious to combine May with Hoggarth and Maeda for the benefit of a more clear and lively clicking operation to obtain the invention as specified in claims 56 and 65.

30. Claim 67 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Miyashita (US 6,909,906) and further in view of May (US 6,509,890).

With respect to claim 67, Hoggarth and Miyashita disclose the electronic device according to claim 66 (see above).

Neither Hoggarth nor Miyashita expressly disclose the port is arranged on an adapter that is releasably connectable to the base.

May discloses, a TrackPoint® port on an adapter that is releasably connectable to the base (fig. 1, col. 2, lines 9-24).

Hoggarth, Miyashita and May are all analogous art because they are all from the same field of endeavor namely removable cursor control devices for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to connect the joystick of Hoggarth and Miyashita, to the base using the TrackPoint® adapter of May. To further explain, TrackPoint® is used by both Hoggarth and May, thus making the combination even more clear.

One motivation for the above combination is to allow for two-handed manipulation (May, col. 1, lines 37-40).

Therefore it would have been obvious to combine Hoggarth and Miyashita with May for the benefit of two-handed manipulation to obtain the invention as specified in claim 67.

31. Claims 70-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view Miyashita et al. (US 6,909,906). and further in view of Fleck et al. (US 6,259,438).

With respect to claims 70-71, Miyashita and Hoggarth disclose, the electronic device of claim 66 (see above).

Neither Miyashita nor Hoggarth discloses, a touch screen or a wheel.

Fleck discloses, a cursor control member (fig. 1) containing a wheel (7 in fig. 1) and a touch screen (51 in fig. 8; col. 2, lines 54-67).

Miyashita, Hoggarth and Fleck are all analogous art because they are from the same field of endeavor namely cursor control devices for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include a wheel or a touch pad as taught by Fleck in the joystick of Hoggarth and Miyashita.

The motivation for doing so would have been to allow the user to manipulate two degrees of freedom with the touch sensitive area (Fleck; col. 2, lines 65-67).

Therefore it would have been obvious to combine Fleck with Miyashita and Hoggarth for the benefit of additional functionality to obtain the invention as specified in claims 70-71.

32. Claim 73 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Miyashita (US 6,909,906) and further in view of Langstraat (US 2003/0076302).

With respect to claim 73, Hoggarth and Miyashita disclose, the electronic device according to claim 66 (see above).

Neither Hoggarth nor Miyashita expressly disclose a storage slot on the base for the cursor control.

Langstraat discloses a storage slot on the base, the storage slot being configured to receive the cursor control member (118 in figs. 1-2).

Hoggarth, Miyashita and Langstraat are all analogous art because they are both from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to construct the base and design of the cursor control member of Hoggarth and Miyashita in a fashion similar to Langstraat.

The motivation for doing so would have been convenience for the user, lessening the likelihood of losing the cursor control member.

Therefore it would have been obvious to combine Langstraat with Hoggarth and Miyashita for the benefit of user convenience to obtain the invention as specified in claims 73.

33. Claim 74 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoggarth (US 6,654,004) in view of Miyashita (US 6,909,906) and further in view of May et al. (US 6,271,834).

With respect to claim 74, Hoggarth and Miyashita disclose, the electronic device according to claim 66 (see above).

Neither Hoggarth nor Miyashita expressly disclose, feedback signals to the device.

May discloses, wherein a processing unit (12 in fig. 1) of the base (10 in fig. 1) produces a second control signal (electrical signal, col. 4, lines 10-18) that controls movement of a cursor control member (movement of the cap, col. 4, lines 10-18) upon occurrence of a predetermined event (depressing joystick actuator, col. 4, lines 10-18) when the cursor control member is engaged with the port (fig. 4).

Hoggarth, Miyashita and May are all analogous art because they are both from the same field of endeavor namely, removable cursor control members for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include feedback as taught by May in the cursor control member of Hoggarth and Miyashita.

The motivation for doing so would have been to overcome the tedious nature of clicking with a TrackPoint® control actuator (May, col. 2, lines 34-37).

Therefore it would have been obvious to combine May with Hoggarth and Miyashita for the benefit of a more clear and lively clicking operation to obtain the invention as specified in claims 74

34. Claims 76-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langstraat (US 2003/0076302) in view of Hoggarth (US 6,654,004).

With respect to claim 76, Langstraat discloses, the electronic device of claim 75 (see above).

Langstraat does not expressly disclose, an input mechanism.

Hoggarth discloses, a cursor control member (60 in fig. 4) includes a manually operable input mechanism (64 in fig. 4) that produces control signals when operated and the attachment element and port are configured so as to communicate those control signals to a processing unit in the base (col. 4, lines 61-67).

Langstraat and Hoggarth are analogous art because they are from the same field of endeavor namely removable cursor control devices for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the input mechanism and control signal communication means of Hoggarth on the stylus of Langstraat.

The motivation for doing so would have been to provide additional functionality in the stylus.

Therefore it would have been obvious to combine Langstraat with Hoggarth for the benefit of additional functionality to obtain the invention as specified in claim 76.

With respect to claim 77, Hoggarth and Langstraat disclose, the electronic device of claim 75 (see above).

Hoggarth further discloses, wherein the input mechanism comprises a button (80 in fig. 4; col. 5, lines 7-15).

35. Claims 78-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langstraat (US 2003/0076302) in view of Hoggarth (US 6,654,004) and further in view of Fleck et al. (US 6,259,438).

With respect to claims 78-79, Langstraat and Hoggarth disclose, the electronic device of claim 75 (see above).

Neither Langstraat nor Hoggarth discloses, a touch screen or a wheel.

Fleck discloses, a cursor control member (fig. 1) containing a wheel (7 in fig. 1) and a touch screen (51 in fig. 8; col. 2, lines 54-67).

Langstraat, Hoggarth and Fleck are all analogous art because they are from the same field of endeavor namely cursor control devices for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include a wheel or a touch pad as taught by Fleck in the joystick stylus of Hoggarth and Langstraat.

The motivation for doing so would have been to allow the user to manipulate two degrees of freedom with the touch sensitive area (Fleck; col. 2, lines 65-67).

Therefore it would have been obvious to combine Fleck with Langstraat and Hoggarth for the benefit of additional functionality to obtain the invention as specified in claims 78-79.

36. Claim 95 is rejected under 35 U.S.C. 103(a) as being unpatentable over Langstraat (US 2003/0076302) in view of Hoggarth (US 6,654,004) and further in view of May (US 6,509,890).

With respect to claim 95, Hoggarth and Langstraat disclose the electronic device according to claim 75 (see above).

Neither Hoggarth nor Langstraat expressly disclose the port is arranged on an adapter that is releasably connectable to the base.

May discloses, a TrackPoint® port on an adapter that is releasably connectable to the base (fig. 1, col. 2, lines 9-24).

Hoggarth, Langstraat and May are all analogous art because they are all from the same field of endeavor namely removable cursor control devices for portable computers.

At the time of the invention it would have been obvious to one of ordinary skill in the art to connect the joystick of Hoggarth and Langstraat, to the TrackPoint® adapter of May. To further explain, TrackPoint® is used by both Hoggarth and May, thus making the combination even more clear.

One motivation for the above combination is to allow for two-handed manipulation (May, col. 1, lines 37-40).

Therefore it would have been obvious to combine Hoggarth and Langstraat with May for the benefit of two-handed manipulation to obtain the invention as specified in claim 95.

Conclusion

37. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Will Boddie whose telephone number is (571) 272-0666. The examiner can normally be reached on Monday through Friday, 7:30 - 4:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Wlb
2/17/06

AMR A. AWAD
PRIMARY EXAMINER